Configuring IP interfaces for SIP in AOS IPBGs

In AOS voice products, every IP interface on which SIP and/or RTP will pass will require a 'media-gateway' configured.

The syntax for the interface configuration command is below:
```
(config-eth 0/1)#media-gateway ip ?
loopback          - specify a local loopback interface address
primary           - specify the primary IP address on this interface
secondary         - specify a secondary IP address on this interface
```

Most applications will only require that 'media-gateway ip primary' be configured on an interface. For example,
```
!
interface eth 0/1
  ip address  10.10.10.1  255.255.255.0
  media-gateway ip primary
  no shutdown
!
```

If multiple WAN interfaces were used to connect to a SIP server, a loopback media-gateway could be used to keep the SIP & RTP IP addresses consistent on both interfaces. For example,
```
!
interface eth 0/1
  ip address  10.10.10.1  255.255.255.0
  media-gateway ip loopback 1
  no shutdown
!
interface eth 0/2
  ip address  10.10.20.1  255.255.255.0
  media-gateway ip loopback 1
  no shutdown
!
interface loopback 1
  ip address  192.168.1.1  255.255.255.255
  no shutdown
!
```

Depending on the application, the media-gateway command will make changes to certain parts of the SIP packet.

In a **TDM or analog back-to-back user-agent** configuration, the configured media-gateway address will be used as the:
1. source IP address of SIP packets outbound from the interface
2. source IP address of RTP packets outbound from the interface
3. SIP Contact host
4. SIP Via host
5. SDP owner/creator address
6. SDP connection-field connection-address

For the next 4 applications, it is worth noting that the SDP owner/creator address and SDP connection-field connection-address are either 1) preserved if NAT is disabled or 2) changed to reflect the source NAT address specified in the firewall configuration. This is because AOS IPBGs do not act as an RTP proxy.

In a **SIP back-to-back user-agent** configuration, the configured media-gateway address will be used as the:
1. source IP address of SIP packets outbound from the interface
2. SIP Contact host
3. SIP Via host

In a **SIP transparent proxy** configuration, the configured media-gateway address will only be used as the:
1. source IP address of SIP packets outbound from the interface

In a **SIP stateful proxy** configuration, the configured media-gateway address will be used as the:
1. source IP address of SIP packets outbound from the interface
2. SIP Contact host
3. SIP Via host
4. Record-route address

In a **SIP outbound proxy** configuration, the configured media-gateway address will be used as the:
1. source IP address of SIP packets outbound from the interface
2. SIP Via host
3. Record-route address